

**LPDES PERMIT NO. LA0117617, AI NO. 104090, ACTIVITY NO. PER20060007**

**LPDES STATEMENT OF BASIS  
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM  
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA**

**COMPANY/FACILITY:** Discovery Producer Services LLC  
Discovery Paradis Fractionation Plant  
Post Office Box 1699  
Larose, LA 70373

**ISSUING OFFICE:** Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313

**PREPARED BY:** Elizabeth H. Johnson  
Water Permits Division  
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**DATE PREPARED:** April 20, 2007

**1. PERMIT STATUS**

**A. Reason for Permit Action:**

Proposed revocation and reissuance of an existing Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711.

Discovery requested a major modification (dated November 9, 2006) to the current permit to provide for a more accurate description of the discharges from Outfall 001 and to add a new stormwater runoff outfall, Outfall 007. After a thorough review of the existing permit, the Rationale for Natural Gas Processing Plants and Compressor Stations, Criteria for Biomonitoring and LAC 33:IX.2511.A.1, LAC 33:IX.2511.A.2.b, and LAC 33:IX.2903, LDEQ has determined that a revocation and reissuance of the LPDES permit is warranted in lieu of a major modification.

**B. LPDES permit effective date:** July 1, 2004  
**LPDES permit expiration date:** June 30, 2009

**C. Date Application Received:** November 13, 2006

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**2. FACILITY INFORMATION****A. LOCATION:**

15849-B Old Spanish Trail, Hwy. 631, Paradis, St. Charles Parish  
 Latitude 29° 51'37", Longitude 90° 27'12"

- FACILITY TYPE/ACTIVITY:**

This is an existing natural gas processing plant that processes raw natural gas through cryogenic separation and distillation. Raw natural gas is dehydrated with molecular sieve then cryogenically separated into two streams: residue gas (primarily methane), and natural gas liquids. The residue gas is sent offsite by pipeline. The natural gas liquids are distilled to produce ethane, propane, butanes, and natural gasoline.

This facility is co-owned by Discovery Producer Services LLC (Discovery) and Texaco Pipelines LLC (Texaco). Both operators are permitted for their portion of the processing and resulting discharges. This document and modified permit cover only the Discovery operations (gas processing).

The Discovery facility continuously discharges cooling tower and boiler blowdown, and intermittently discharges process area and non-process area stormwater runoff.

- C. 40 CFR Chapter I, Subchapter N, Effluent Guidelines and Standards, Parts 401, 405 – 415, and 417-471 have been adopted by reference in LAC 33:IX.4903.

Guideline

NA

Reference

NA

**D. FEE RATE**

1. Fee Rating Facility Type: minor
2. Complexity Type: II
3. Wastewater Type: III
4. SIC code: 1321

**3. OUTFALL INFORMATION****Outfall 001:**

Discharge Type: The combined intermittent discharge of stormwater runoff, previously monitored stormwater runoff from Internal Outfall 003 and previously monitored cooling tower blowdown and boiler blowdown from Internal Outfall 101.

Treatment: None

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Location: At the point of discharge from the Fire Water Pond at Latitude 29 51' 37", Longitude 90 27' 03"

Flow: Intermittent

Discharge Route: local drainage thence to Crawford Canal thence to Bayou Gauche (020302)

**Internal Outfall 101:**

Discharge Type: Cooling tower blowdown and boiler blowdown.

Treatment: Chlorine, sulfuric acid, biocide, dispersant polymer, and corrosion inhibitor

Location: At the point of discharge west of the cooling towers prior to combining with other waters at Latitude 29 51' 37", Longitude 90 27' 03"

Flow: 0.1 MGD

Discharge Route: Fire Water Pond, thence to Facility 002 Canal via Final Outfall 001

**Internal Outfall 003:**

Discharge Type: Stormwater runoff from the northern sector of the facility and the drainage area for Outfall 006 when the Outfall 006 weir is closed (normal)

Treatment: Oil and grease skimmer

Location: At the point of discharge at the northeastern sector of the facility perimeter prior to combining with other waters in the Fire Water pond at Latitude 29 51' 41", Longitude 90 27' 00"

Flow: Intermittent

Discharge Route: Fire Water Pond, thence to Facility 002 Canal via Final Outfall 001

**Outfall 006:**

Discharge Type: Stormwater runoff from the northern sector of the facility paralleling the facility rail loading area (Outfall 006 weir is normally closed and the discharge is usually routed to Internal Outfall 003)

Treatment: None

Location: At the point of discharge at the northeast corner of the facility prior to combining with other waters at Latitude 29 51' 45", Longitude 90 27' 00"

Flow: Intermittent

Discharge Route: local drainage thence to Crawford Canal thence to Bayou Gauche (020302)

**Outfall 007:**

Discharge Type: Stormwater runoff from the facility truck loading area in the northwestern sector of the facility

Treatment: None

Location: At the point of discharge at the northwestern corner of the facility prior to combining with other waters at Latitude 29° 51' 44", Longitude 90° 27' 13"

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Flow: Intermittent

Discharge Route: local drainage thence to Crawford Canal thence to Bayou Gauche (020302)

#### 4. RECEIVING WATERS

Stream: Bayou Gauche

Basin and Subsegment: Subsegment 020302 of the Barataria Basin

Designated Uses:

- a. primary contact recreation
- b. secondary contact recreation
- c. propagation of fish and wildlife

#### 5. PROPOSED CHANGES FROM THE CURRENT LPDES PERMIT

- A. **Outfall 001** – the description has been changed from “the discharge of previously monitored cooling tower and boiler blowdown” to “the combined intermittent discharge of stormwater runoff, previously monitored stormwater runoff from Internal Outfall 003 and previously monitored cooling tower blowdown and boiler blowdown from Internal Outfall 101.” in order to be more accurate regarding current facility operations.
- B. **Outfall 001** – Biomonitoring requirements from the previous permit have been removed from this proposed permit. This is based on the following: Louisiana’s Water Quality Management Plan (Volume 3 – Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards); DMR review showing 001 has not discharged from April 2004 to April 2007; and discharge type.
- C. **Outfall 001** – Temperature reporting has been removed from this outfall based on the fact that this outfall has not discharged during the reporting period and the fact that this discharge is from a fire water retention pond.
- D. **Outfall 001** – Requirements for TOC and Oil & Grease have been added to this outfall based on the discharge consisting mostly of storm water.
- E. **Outfall 001** – A reporting requirement for TDS has been added due to the receiving stream being placed on the 2006 Final Integrated Report/303(d) list as impaired for TDS.
- F. **Outfall 101** – Chromium and Zinc limitations have been removed from this outfall based on a review of DMRs submitted. Chromium and Zinc containing compounds were not used during the period of the review. Also, this internal outfall flows to the fire water pond which, per the DMR review, has shown 001 has not discharged from April 2004 to April 2007.

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- G. **Outfall 003** – pH limits have been removed from this internal outfall based on the flow of this outfall to Outfall 001, which has a pH limitation. The point of compliance for pH shall be at Outfall 001.
- H. **Outfall 003** – the description has changed from “the discharge of stormwater runoff from the northern sector of the facility” to “stormwater runoff from the northern sector of the facility and the drainage area for Outfall 006 when the Outfall 006 weir is closed (normal)”.
- I. **Outfall 007** – This is a newly proposed outfall for the discharge of storm water runoff from the facility truck loading area in the northwestern sector of the facility.

**6. PROPOSED EFFLUENT LIMITS**

The following section sets forth the principal facts and the insignificant factual, legal, methodological and policy question considered in preparing the draft permit. Also, set forth are any calculation or other explanations of the derivation of specific effluent limitation and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

**Outfall 001:** The combined intermittent discharge of stormwater runoff, previously monitored stormwater runoff from Internal Outfall 003 and previously monitored cooling tower blowdown and boiler blowdown from Internal Outfall 101.

| EFFLUENT CHARACTERISTIC | MONTHLY AVERAGE | DAILY MAXIMUM | MEASUREMENT FREQUENCY | SAMPLE TYPE |
|-------------------------|-----------------|---------------|-----------------------|-------------|
| Flow-MGD                | Report          | Report        | 1/quarter             | Estimate    |
| TOC                     | ---             | 50 mg/L       | 1/quarter             | Grab        |
| Oil & Grease            | ---             | 15 mg/L       | 1/quarter             | Grab        |
| TDS                     | ---             | Report        | 1/quarter             | Grab        |
| pH Min/Max (s.u.)       | 6.0             | 9.0           | 1/quarter             | Grab        |

**Flow** – established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored 1/quarter by estimate. This requirement is retained from the previous permit with no change.

**TOC and Oil & Grease** – established in accordance with LDEQ storm water guidance, letter dated 6/17/87, from Givens (LDEQ) to Knudson (EPA) and Best Professional Judgment. Both shall be monitored 1/quarter by grab sample.

**pH** – established in accordance with LAC 33:IX.1113.C.1. pH shall be monitored 1/quarter by grab sample. This requirement is retained from the previous permit with no change.

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**TDS** – established by Best Professional Judgment due to the receiving stream being placed on the 2006 Final Integrated Report/303(d) list as impaired for TDS and the need for data regarding this facility's discharges for accurate TMDL development.

**Internal Outfall 101:** Cooling tower blowdown and boiler blowdown

| EFFLUENT CHARACTERISTIC | MONTHLY AVERAGE | DAILY MAXIMUM | MEASUREMENT FREQUENCY | SAMPLE TYPE |
|-------------------------|-----------------|---------------|-----------------------|-------------|
| Flow-MGD                | Report          | Report        | 1/month               | Estimate    |
| TOC                     | ---             | 50 mg/L       | 1/month               | Grab        |
| COD                     | ---             | 125 mg/L      | 1/month               | Grab        |
| TDS                     | ---             | Report        | 1/month               | Grab        |
| Free Available Chlorine | ---             | 0.5 mg/L      | 1/month               | Grab        |
| Oil & Grease            | ---             | 15 mg/L       | 1/month               | Grab        |
| TSS                     | ---             | 100 mg/L      | 1/month               | Grab        |

**Flow** – established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored 1/month by estimate. This requirement is retained from the previous permit with no change.

**pH** – established in accordance with LAC 33:IX.1113.C.1. pH shall be monitored 1/month by grab sample. This requirement is retained from the previous permit with no change.

**TOC, COD, TDS, FAC, O&G, and TSS** – all of these parameters are established by Best Professional Judgment and the Rationale for Natural Gas Processing Plants and Compressor Stations. These requirements are retained from the previous permit with no changes.

**Internal Outfall 003:** Stormwater runoff from the northern sector of the facility and the drainage area for Outfall 006 when the Outfall 006 weir is closed (normal)

| EFFLUENT CHARACTERISTIC | MONTHLY AVERAGE | DAILY MAXIMUM | MEASUREMENT FREQUENCY | SAMPLE TYPE |
|-------------------------|-----------------|---------------|-----------------------|-------------|
| Flow-MGD                | Report          | Report        | 1/quarter             | Estimate    |
| TOC                     | ---             | 50 mg/L       | 1/quarter             | Grab        |
| Oil & Grease            | ---             | 15 mg/L       | 1/quarter             | Grab        |

**Flow** – established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored 1/quarter by estimate. This requirement is retained from the previous permit with no change.

**TOC and Oil & Grease** – established in accordance with LDEQ storm water guidance, letter dated 6/17/87, from Givens (LDEQ) to Knudson (EPA) and Best Professional Judgement. Both shall be monitored 1/quarter by grab sample. These requirements are retained from the previous permit with no changes.

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**Outfall 006:** Stormwater runoff from the northern sector of the facility paralleling the facility rail loading area (Outfall 006 weir is normally closed and the discharge is usually routed to Internal Outfall 301)

| EFFLUENT CHARACTERISTIC | MONTHLY AVERAGE | DAILY MAXIMUM | MEASUREMENT FREQUENCY | SAMPLE TYPE |
|-------------------------|-----------------|---------------|-----------------------|-------------|
| Flow-MGD                | Report          | Report        | 1/quarter             | Estimate    |
| TOC                     | ---             | 50 mg/L       | 1/quarter             | Grab        |
| Oil & Grease            | ---             | 15 mg/L       | 1/quarter             | Grab        |
| pH Min/Max (s.u.)       | 6.0             | 9.0           | 1/quarter             | Grab        |

**Flow** – established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored 1/quarter by estimate. This requirement is retained from the previous permit with no change.

**TOC and Oil & Grease** – established in accordance with LDEQ storm water guidance, letter dated 6/17/87, from Givens (LDEQ) to Knudson (EPA) and Best Professional Judgment. Both shall be monitored 1/quarter by grab sample. These requirements are retained from the previous permit with no changes.

**pH** – established in accordance with LAC 33:IX.1113.C.1. pH shall be monitored 1/quarter by grab sample. This requirement is retained from the previous permit with no change.

**Outfall 007:** stormwater runoff from the facility truck loading area in the northwestern sector of the facility

| EFFLUENT CHARACTERISTIC | MONTHLY AVERAGE | DAILY MAXIMUM | MEASUREMENT FREQUENCY | SAMPLE TYPE |
|-------------------------|-----------------|---------------|-----------------------|-------------|
| Flow-MGD                | Report          | Report        | 1/quarter             | Estimate    |
| TOC                     | ---             | 50 mg/L       | 1/quarter             | Grab        |
| Oil & Grease            | ---             | 15 mg/L       | 1/quarter             | Grab        |
| pH Min/Max (s.u.)       | 6.0             | 9.0           | 1/quarter             | Grab        |

**Flow** – established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored 1/quarter by estimate.

**TOC and Oil & Grease** – established in accordance with LDEQ storm water guidance, letter dated 6/17/87, from Givens (LDEQ) to Knudson (EPA) and Best Professional Judgment. Both shall be monitored 1/quarter by grab sample.

**pH** – established in accordance with LAC 33:IX.1113.C.1. pH shall be monitored 1/quarter by grab sample.

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## **7. COMPLIANCE HISTORY/COMMENTS**

A. Compliance History - None

B. DMR Review

A DMR review was conducted covering the period from April 20, 2004 through April 20, 2007. No excursions were reported.

## **8. TOTAL MAXIMUM DAILY LOADING (TMDL)**

Subsegment Number 020302, of the Barataria Basin is listed on LDEQ's Final 2006 303(d) List as impaired for organic enrichment/ low dissolved oxygen, chlorides, sulfates, TDS, and nutrients. To date, no TMDL assessments have been completed for this waterbody. Based upon an evaluation of this facility's discharges, it was determined that the permittee does not have a reasonable potential to contribute to an effluent violation above the state water quality standard for chlorides, sulfates, and nutrients. This Office has decided not to require reporting for chlorides, sulfates, and nutrients. This determination is made through best professional judgment. Effluent limits requirements for TOC have been established in the draft permit to ensure that the integrity of the waterbody is maintained for organic enrichment/low dissolved oxygen. Based on the potential to discharge TDS, a reporting requirement has been placed in the permit at Outfall 001 for data gathering and future TMDL development. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

## **9. "IT" QUESTIONS – APPLICANT'S RESPONSES**

Discovery Paradis Fractionation Plant is a minor facility with no changes in design, therefore, "IT" questions were not required to be submitted.

## **10. ENDANGERED SPECIES**

The receiving waterbody, Subsegment 020302 of the Barataria Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). The LDEQ, as instructed by the FWS in a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, as set forth in the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon any endangered or candidate species or the critical habitat. The effluent limitations established



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in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat, as requiring consultation with the U. S. Fish and Wildlife Service (FWS).

## **11. HISTORIC SITES**

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

## **12. TENTATIVE DETERMINATION**

Based on preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

## **13. PUBLIC NOTICES**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the proposed issuance of LPDES individual permits and may request a public hearing to clarify issues involved. This Office's address is on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

A local newspaper of general circulation and  
The Office of Environmental Services Public Notice Mailing List